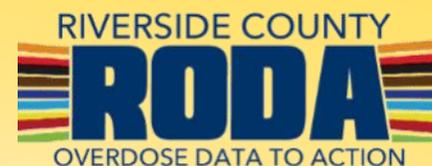


Evaluation Brief



Riverside University Health System — Public Health

Riverside Overdose Data to Action

June 2022 |

Riverside Overdose Data to Action, Empowering Individuals to Make Safer Choices: Year 2 Progress & Evaluation

Established in September 2019, the [Riverside Overdose Data to Action \(RODA\)](#) program is integrated into Riverside University Health System (RUHS) - Public Health's Epidemiology and Program Evaluation Branch. RODA aims to enhance the surveillance of overdose morbidity and mortality and to use this improved surveillance data to guide overdose prevention efforts. Funded by the Centers for Disease Control and Prevention (CDC), the program is organized around six overarching strategies [Figure 2].

This brief discusses RODA's work under the strategy Empowering Individuals to Make Safer Choices [Figure 1], including successes and barriers encountered, ending with recommendations for year 3. This strategy's overarching goals are to decrease opioid use and misuse; raise awareness among youth of overdose prevention; raise awareness for trauma-informed practices, safe coping skills, and symptoms of behavioral health challenges.

Key activity areas within this strategy are:

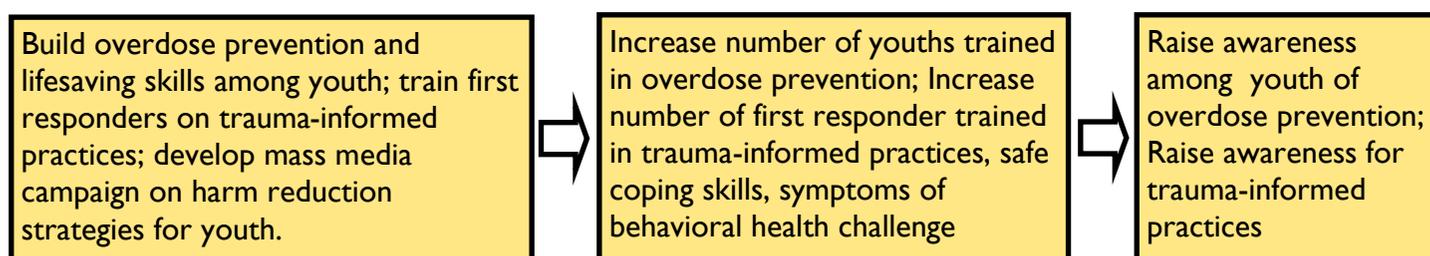
- Youth-centered overdose prevention training, risk screening, and referral
- First-responder trauma-informed practice training
- Youth mass media campaign

KEY MILESTONES

- ▶ Though the COVID-19 pandemic was a considerable barrier, significant progress in RODA activities continued.
- ▶ 615 students from 5 high-schools and one middle-school received overdose prevention training.
- ▶ 277 students screened for substance use related risks.
- ▶ 55 first-responders, including leadership, received trauma informed care training.
- ▶ Youth mass media campaign successfully designed and launched in early year 3 (October 2021).

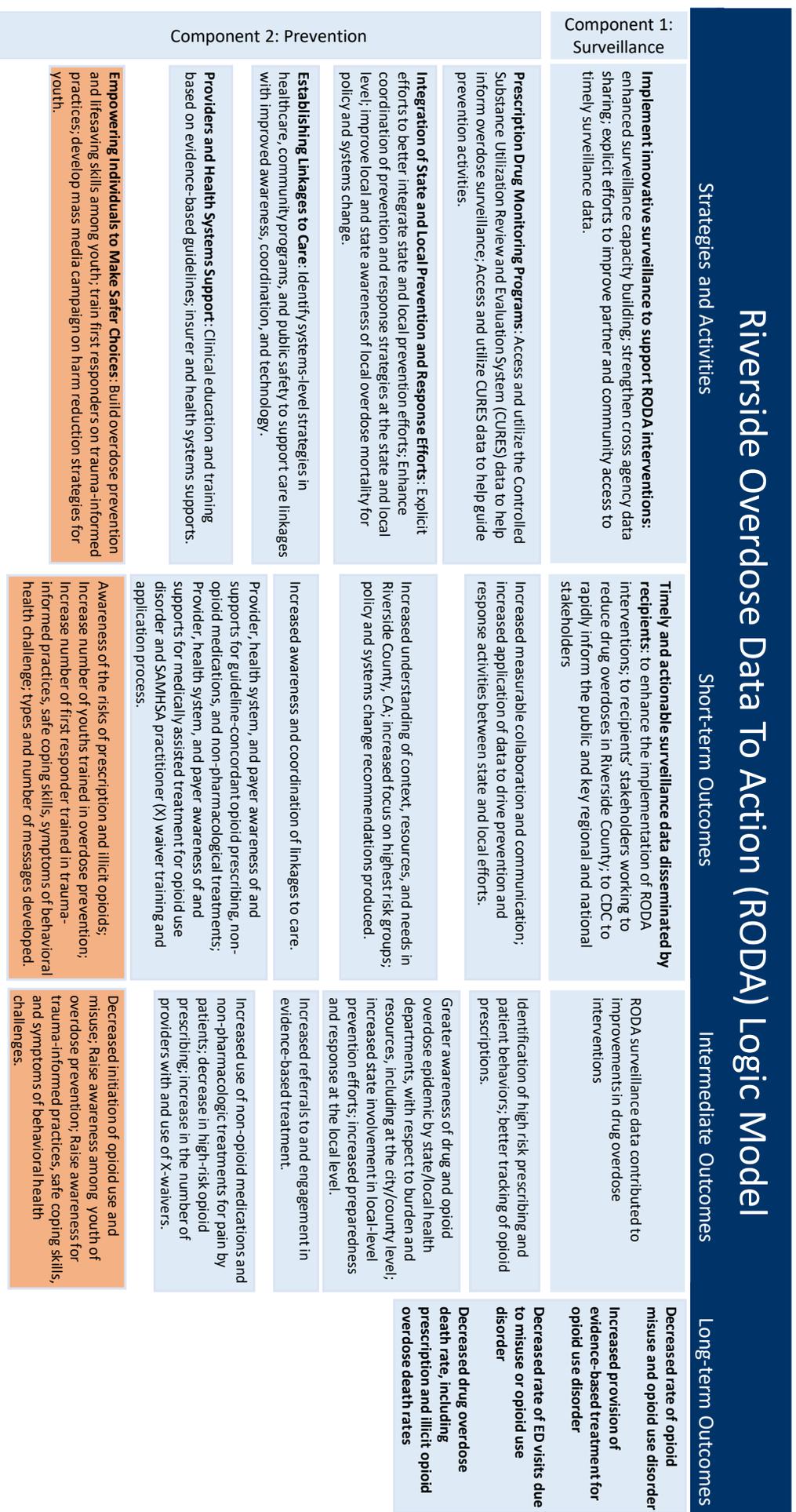
Past [Evaluation Briefs](#) highlighted RODA strategies *Enhanced Overdose Surveillance, Integration of Overdose Prevention and Response Efforts, Establishing Linkages to Care, and Provider and Health System Support*.

Figure 1: Strategy's Simplified Logic Model



The logic model below [Figure 2] shows the strategies, activities and expected outcomes of the RODA project. This brief discusses *Empowering Individuals to Make Safer Choices*; activities and outcomes highlighted in orange.

Figure 2: Riverside Overdose Data to Action (RODA) Logic Model



Evaluation Goals and Questions

The internal evaluation of the Riverside Overdose Data to Action’s (RODA) strategies is designed to collect information that will convey a credible, well-rounded picture of the program’s efforts. These evaluation briefs highlight which interventions are working well and areas that may need improvement.

The following questions were used to guide the evaluation efforts for this strategy:

- How and to what extent has an awareness of overdose prevention among youth been raised?
- How and to what extent has awareness for trauma-informed practices, safe coping skills, and symptoms of behavioral health challenges among first-responders been raised?

Lead Partners for this Strategy

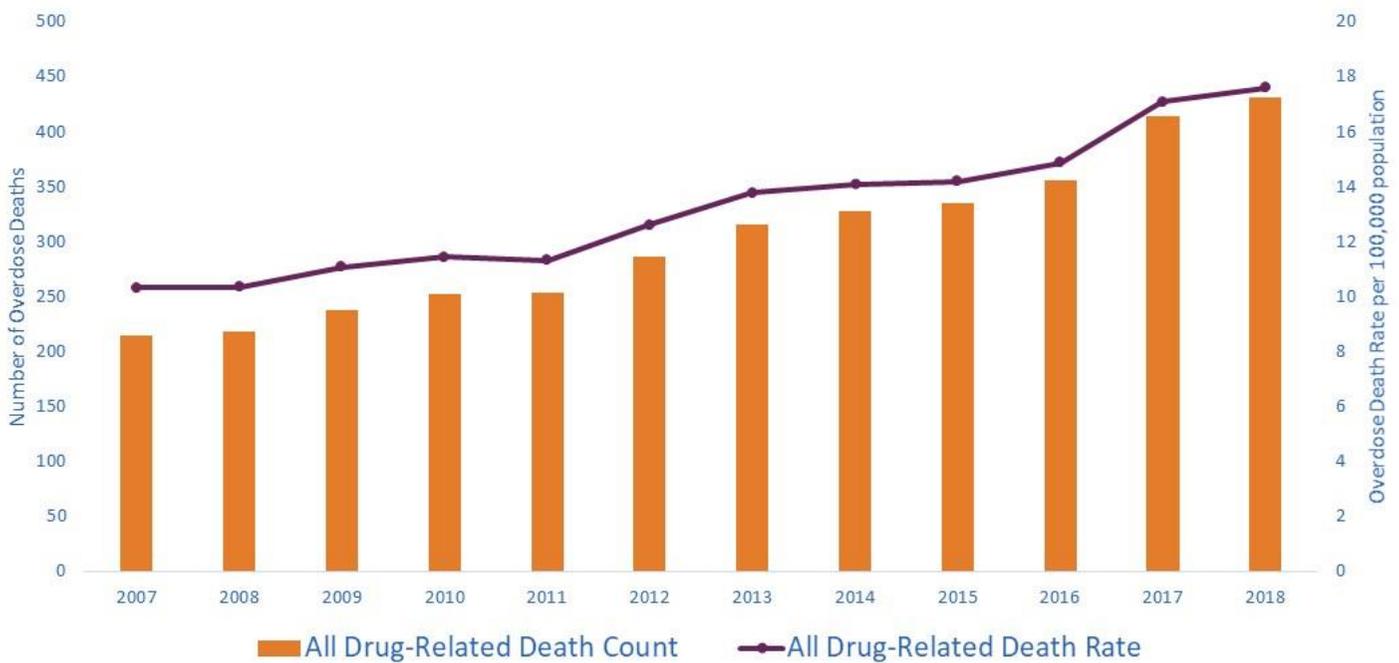


Baseline and Regional Context

Riverside County trends depicted a 10-year increase in overdose deaths, emergency department (ED) visits, and hospitalizations [Figure 4]. Overdose deaths increased from 230 deaths in 2008 to 430 deaths in 2017, and rates increased 63% from 2008 to 2017 (from 11 to 18 per 100,000). For up-to-date data on overdoses in Riverside County, see the [RODA Overdose Data Dashboard](#).

The Riverside Overdose Data to Action (RODA) youth overdose prevention training, first-responder trauma-informed care training, and youth mass media campaign are novel approaches for RUHS - PH in combating the increase in fatal and non-fatal overdoses throughout the county.

Figure 4: Historic trend in overdose deaths, Riverside County, 2007-2018



A Note on COVID-19 impact on RODA operations

Beginning in March 2020, many of the core and supporting RODA staff were required to work at the Riverside County Emergency Operations Center (EOC). During this time, epidemiologists and research analysts were conducting contact tracing and statistical modeling to understand the impact of COVID-19 in Riverside County. The public health nurses were monitoring calls on the public health nurse call line, contact tracing, and conducting follow-up with individuals in isolation or quarantine. The RODA project investigator, program director, and program coordinators were all involved with planning and operational duties to ensure an effective county-wide response to COVID-19. The program director and one program coordinator returned to RODA operations full-time in July 2020. At the end of year 2, the RODA project investigator, surveillance lead, lead evaluator, and program coordinator continue to be partially or fully assigned to COVID-19 response.

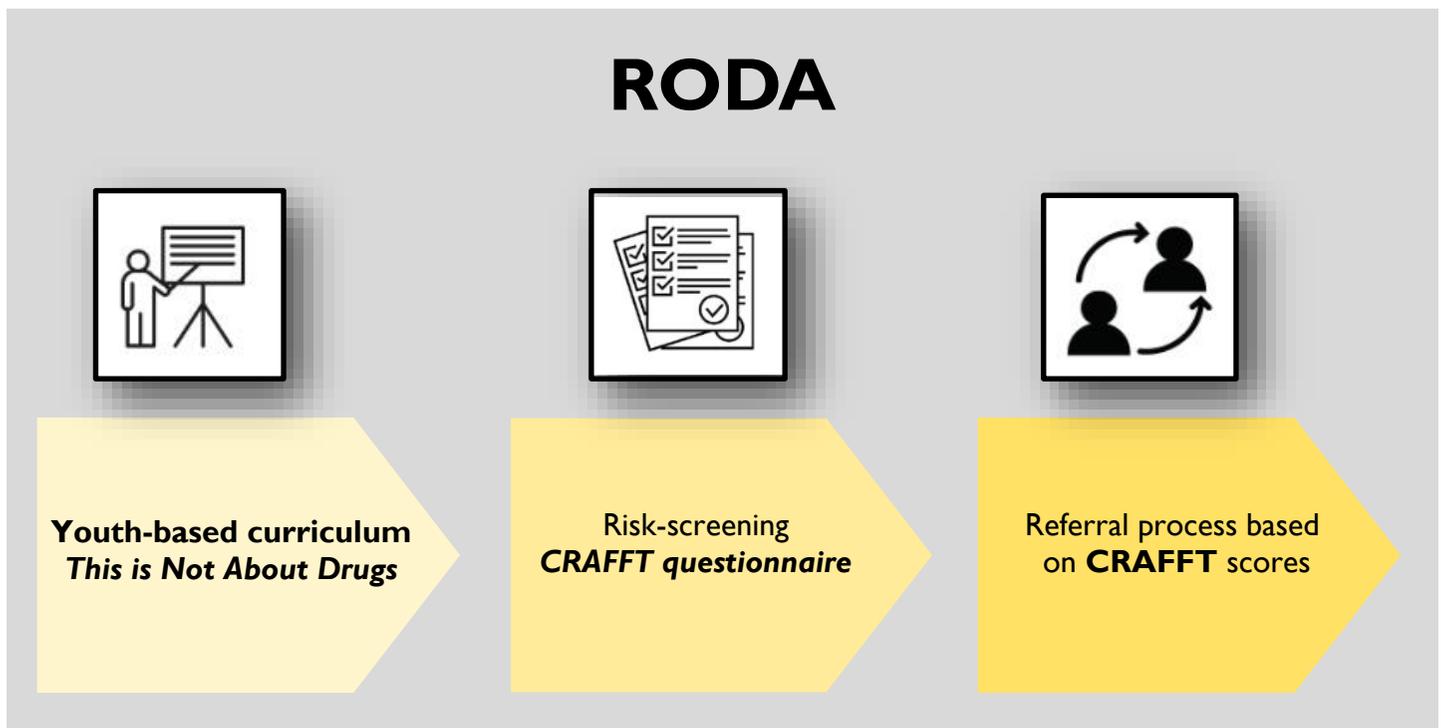
YOUTH-BASED CURRICULUM, SCREENING, AND REFERRAL

Objective: Implementation of a youth-based curriculum, risk-screening, and referral process for overdose prevention in middle and high schools in Riverside County.

Evidence-based curriculum: [This is Not About Drugs](#) Prescription Pain Medicine (Opioids) and Heroin Prevention Education Program (TINAD), which covers: 1. The risks of prescription pain drug misuse; 2. How misuse can lead to addiction, heroin use, overdose, and death; 3. How to recognize opioid overdose symptoms, the availability of naloxone, and the necessity to call 911; 4. Understanding the disease of addiction and the impact on the individual, family, and friends; 5. Alternatives to using substances in dealing with life stresses; 6. The many ways to ask for help and available information and resources.

Validated screening tool: [CRAFFT](#) is a 9-question tool developed to screen adolescents between 12 and 21 years old who may be at high risk for alcohol and other drug use disorders. It's a quick and effective screening tool to assess whether a longer conversation about use, frequency, and other risks and consequences is warranted. The CRAFFT tool can be self-administered or administered by a clinician. For this program, the CRAFFT screening is voluntary, and students take it on their own.

Referral process: Based on the CRAFFT score, students are assessed to have either LOW, MEDIUM, or HIGH risk factors for developing an alcohol or drug use disorder. After the screener is completed and scored, the student may be referred to a RUHS Behavioral Health Specialist or a school site counselor. When the student is referred to Behavioral Health, a one-on-one 90-minute assessment is done to determine the necessary course of action for the student.



Timeline and Successes

Year 1 (9/1/2019—8/31/2020):

- Researched and adopted the curriculum and screening tool.
- Curriculum facilitators were trained.
- Updated existing MOUs (when needed) and received approval from 6 schools (1 middle school; 5 high schools) to implement TINAD overdose prevention training.
- Created implementation plan for using This is Not About Drugs (TINAD) and CRAFFT screening tool; Referral process finalized to refer individuals with moderate to high risk to Behavioral Health Specialists or on-campus counselors.

Year 2 (9/1/2020—8/31/2021):

- Two trainings on TINAD for school administrators and educators (e.g., Riverside County Office of Education)
- 615 students from 6 hosting schools received the training.
- 277 or 45% of all students trained completed the CRAFFT screening tool. Of those, 178 had a low-risk score, 33 medium-risk, and 16 high-risk scores.
 - 49 students were referred to RUHS-Behavioral Health (2) or school-based counseling (47)

Barriers / Challenges

- Introducing the curriculum:
 - Many school districts were apprehensive about addressing harm reduction strategies with youth when first approached with this opportunity.
 - Some school districts had initial concerns about covering opioid overdose treatments (Narcan/naloxone), fearing students may see these interventions as options for continued drug use.
- COVID-19 and online classrooms:
 - When the structure of this program was first developed, RUHS-PH anticipated offering in-person presentations. The design included a more comprehensive screening tool that addresses the root behaviors that might lead to the development of a substance use disorder. This thorough screening also came with a subsequent curriculum that could be offered in multiple sessions to provide youth strategies for redirecting concerning behaviors. With the emergence of COVID-19, the program had to pivot and change the programming to a virtual option. Moving online created challenges in connecting with students and offering more comprehensive programming.
- CRAFFT completion rate:
 - 55% of trained students did not complete the CRAFFT creating early identification and intervention challenges.

Impact of the youth-based curriculum, screening, and referral program

In grant year 2, RUHS-Public Health, Injury Prevention Services trained 615 middle and high school students using the “This is Not About Drugs” curriculum. Of the 412 pre-tests and 162 post-tests submitted, significant improvement was observed in five of the six questions. On question 5, the students scored well pre-test and continued to score well post-test with no significant change [Figure 5].

After each training, students are asked, “What is something you learned after seeing the film and participating in the discussion?” One hundred thirty-eight students responded to this question. A representative sample of statements made by the students is listed below:

- “That you can have an overdose even if it is the first time taking drugs.”
- “I learned after watching the film is that It is really hard for people to stop after they’re hooked.”
- “I have learned how to help someone when they need help.”
- “I learned that prescription pain medication is the same as heroin.”
- “After seeing the film and participating, I learned that anyone can get addicted.”
- “I learned that overdose is more common than I thought.”
- “I learned that drugs could really mess you up, and you are always at risk of overdosing.”

Forty-nine students were referred to a RUHS Behavioral Health Specialist or a school site counselor for further assessment and a more extended conversation about use, frequency, and other substance use risks and consequences. These referrals provide a new opportunity for early intervention.

Figure 5: Youth-based curriculum pre/post test results.

Test Question/Statements	Mean Pre/Post – Test Scores	
Prescription pain pills such as Hydrocodone and Oxycodone are the SAME TYPE of drug as heroin.	Improved Scores (from 3.0 to 2.1)	▼
Using prescription pain pills not prescribed to you is AS RISKY as using heroin.	Improved Scores (from 2.4 to 1.8)	▼
Overdose ONLY happens with heavy drug use.	Improved Scores (from 2.7 to 3.5)	▲
I WOULD NOT be able to recognize if someone was having an overdose.	Improved Scores (from 3.2 to 3.6)	▲
The younger someone starts drinking alcohol or using drugs INCREASES the risk of addiction or alcoholism.	No Change in Scores (from 1.8 to 1.8)	
Drinking alcohol, using marijuana or other drugs INCREASES the likelihood that someone would use heroin.	Improved Scores (from 2.4 to 2.1)	▼

a Independent-Samples Mann-Whitney U Test; b The significance level is .050.

FIRST-RESPONDER TRAUMA INFORMED PRACTICES TRAINING

Objective: Emergency Management Services (EMS) first responders will be trained on trauma informed practices, safe coping skills, and the signs and symptoms of behavioral health challenges that lead to substance abuse in Riverside County.

The Counseling Team International was contracted to provide first responders with in-person Trauma Informed Care training. Trauma Informed Care training broadens understanding of what is meant by trauma and invites individuals and organizations to recognize the impact of traumatic experiences on psycho-social wellbeing. First responders are routinely exposed to traumatic events in their line of work. Participants will be trained on recognizing the signs and symptoms of trauma, pathways to recovery, and how to respond by utilizing this knowledge in policies, procedures, and practices.

Course Objectives:

- Understand the term “trauma-informed care” and its relevance to first responders in organizational policies, procedures, and individual practices.
- Recognize the signs and symptoms of trauma in self, coworkers, patients, and families.
- Understand the possible “why” behind an individual’s ways of thinking, behaving, and relating.
- Identify at least one strategy aimed at managing traumatic experiences.

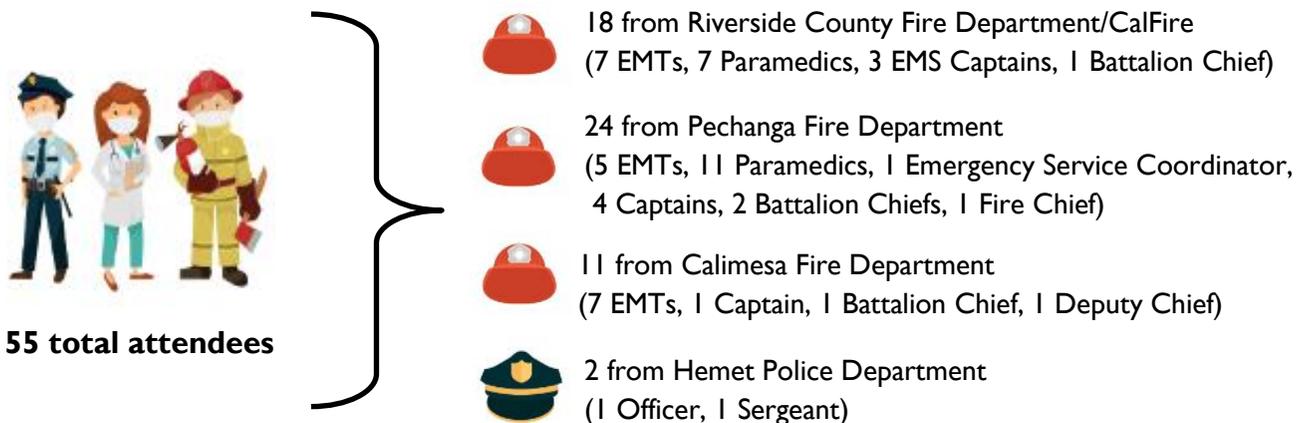
Timeline and Successes

Year 1 (9/1/2019—8/31/2020):

- Identified specialized consultant.
- Finalized the scope of work and cost overview for the consultant.
- Riverside County contracting paperwork submitted for processing.

Year 2 (9/1/2020—8/31/2021):

- Finalized contracting process with The Counseling Team International
- Developed supporting materials for training
- Developed implementation plan for training and dissemination of resources
- A licensed clinical psychologist provided ten in-person sessions from April to August 2021.



- Observation notes were taken at the end of each session by REMSA staff. Significant observations were that the clinician did an excellent job of tailoring the training topics to the individuals who attended the event and the high level of engagement of attendees who appeared very responsive to the ideas presented.

Timeline and Successes (Continued)

Year 2 (9/1/2020—8/31/2021) Continued:

- After the in-person training was implemented, the clinician worked with the REMSA training coordinator to develop online materials for a self-paced, virtual online training that will begin in grant year 4.
- Of the 55 training attendees, 42 (76%) completed the post training evaluation. 95% rated the training as excellent, 97.5% would recommend the training to others. Example comments made by participants of their key takeaways include:
 - “Mental health is a serious matter and I need to look out for signs in others that could indicate they’re going through a rough time. As well as keep myself happy and look out for myself.”
 - “[I gained] “a better understanding of how the stresses of the job are effecting me.”
 - “Be more aware of my behavior and more likely to check in on coworkers as necessary.”

Barriers / Challenges

- EMS first responder sites impacted by COVID-19 response which has delayed implementation.
- Sites requested in-person trainings in the evenings or early mornings due to nature of first responder’s work schedules.
- Delayed implementation because of COVID-19 safety protocols
- Two sessions hosted by American Medical Response (AMR) did not have any AMR staff in attendance. An expectation was for employees to show up for training during their personal time or on their days off, and a lack of incentives or mandates by AMR management were all major contributing factors to the lack of attendance.
- Though overall engagement was excellent, sessions attended by senior staff (e.g., Fire Chiefs) may have made some attendees more reluctant to speak.

Impact of the first-responder trauma informed practices training

- Fifty-five first responders and their leadership from four agencies were trained across Riverside County.
- REMSA/RODA invited to provide this training to Riverside County Fire new hires.
- Attendees and leadership discussed ways to increase the availability and quality of mental health care options for first responders, including the availability of mental health clinicians who specialize in working with first responders or who are trained in Eye Movement Desensitization and Reprocessing (EMDR),
- REMSA is exploring the utilization of FirstWatch to identify Critical Stress Incidents and offering more resources to employees.
- One of the paramedics provided feedback on accessing care through their Employee Assistance Program (EAP). He highlighted the difficulty in navigating the EAP system at their agency.
- To increase the accessibility of the Trauma Informed Care training, learning management software has been purchased, and training videos have been created to provide online/on-demand training in the future.

YOUTH MASS MEDIA CAMPAIGN

Objective: Public Health will launch a mass media campaign that includes harm reduction messages targeted to youth and young adults aged 15 - 24 years old and their parents.



Through a digital media campaign, youth pocket-cards, organic social marketing, and parent webinars, more youth and young adults aged 15 to 24 years old in Riverside County and their parents will be aware of:

- Opioid overdose signs and symptoms
- How to respond to an opioid overdose
- Available resources for substance use help

Timeline and Successes

Year 2 (9/1/2020—8/31/2021):

- Request for proposals and vendor review completed.
- Contract initiated and finalized with Your Social Marketer, Inc.
- Established a county team to oversee the media campaign (RODA, Public Health Public Information Specialists, Public Health IT, Public Health Injury Prevention Services)
- Narrowed the target population to youth, young adults and their parents.
- Tested the messaging among youth (survey went out early August),
- The parent curriculum created and translated into Spanish.
- Finalized the messaging and platforms
- Campaign ready to launch in October 2021 (early grant year 3)

Barriers / Challenges

- Challenges in getting youth to respond to the message testing survey. This process took longer than anticipated.
- Slow county contracting process created delays in implementation.
- Some challenges with merging the vendor created website with Riverside County IT run websites.

Impact of the youth mass media campaign

- Target group testing of messaging successfully completed.
- Media platforms chosen.
- Campaign launched in October 2021 (early grant year 3)

SUMMARY OF EVALUATION QUESTION RESPONSES

- How and to what extent has awareness of overdose prevention among youth been raised?
 - 615 middle and high school students trained using the “This is Not About Drugs” curriculum.
 - Of those completing the pre/post tests significant improvement in understanding of substance misuse and overdose prevention was observed [Figure 5].
 - Mass media campaign for youth 15 - 24 and their parents prepared to launch in early grant year 3.
- How and to what extent has awareness for trauma-informed practices, safe coping skills, and symptoms of behavioral health challenges among first-responders been raised?
 - Fifty-five first responders and their leadership from four agencies were trained across Riverside County.

RECOMMENDATIONS FOR YEAR 3

The recommendations below reflect the position of the author and not necessarily those of RUHS - Public Health or partner agencies.

1. To increase first-responder trauma informed care training coverage, move to an online/on-demand format (in progress).
2. Implement a participant assessment to improve understanding of the impact of first-responder trauma-informed care training.
3. Continue to reach out to school districts and individual schools with information on the importance and proven successes of harm-reduction messaging as part of a comprehensive overdose prevention curriculum.
4. Establish a RODA website for public access to information and resources (in progress).
5. Continue to outreach to youth through media beyond the limited scope of the current campaign.

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